



# UNITED STATES PATENT AND TRADEMARK OFFICE

52  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,451	05/08/2001	Jong-Kwang Kim	678-657 (P9453)	4167
28249	7590	09/09/2004	EXAMINER	
DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. UNIONDALE, NY 11553			FLANDERS, ANDREW C	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 09/09/2004 4

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/851,451

Applicant(s)

KIM, JONG-KWANG

Examiner

Andrew C Flanders

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 8 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The term "type" in claims 1 and 5 is a relative term which renders the claim indefinite. The term "type" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Please see MPEP 2173.05(b). For examination, the term type is understood to be two audio devices capable of being connected to the apparatus.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tran (U.S. Patent 6,359,987) in view of Tan (U.S. Patent 6,449,371).

Art Unit: 2644

6. Regarding Claims 1 and 5, Tran discloses a computer system with an audio signal output channel circuitry providing separate first and second output channels for connection to respective speakers (col. 8 lines 7 – 9) (i.e. an ear jack for transferring the audio signal output to one of a first and a second audio output device), impedance detection circuitry coupled to said audio signal output channel circuitry, said impedance detection circuitry operable to detect, when speakers are connected to said audio signal output channel circuitry, whether said speakers are passively driven speakers having a relatively low impedance level or self-driven speakers having a relatively high impedance level (col. 8 lines 21 – 29) (i.e. a controller for determining the type of audio output device connected to the ear jack depending on the sense signal), a system that selects the proper speaker amplification suitable for the attached speaker load based on the determined impedance level (i.e. generating a sense signal indicating a type of the connected audio output device and controlling an audio gain according to the determined result) (col. 7 lines 26 – 28). Therefore, Tran anticipates all elements of claims 1 and 5 with the exception that Tran does not explicitly disclose the computer as an MP3 player. Tan discloses a computer sound card which is configured to receive two sound channels and mix the sound channel with the PC audio signals (i.e., WAV, MIDI, AIFF, AU, MP3, etc.) (col. 1 lines 24 – 27) (i.e. an mp3 player). It would have been obvious to one of ordinary skill in the art to use Tan's sound card in conjunction with Tran's computer system. One would have been motivated to do so to allow their current personal computer to play various sound files (i.e. an MP3 player).

Art Unit: 2644

7. Claims 2, 3, 4, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tran (U.S. Patent 6,359,987) in view of Tan (U.S. Patent 6,449,371) and in further view of Davis (U.S. Patent 4,410,890).

8. Regarding Claim 2, in addition to the elements stated above regarding claim 1, Tran further discloses use of unamplified external speakers as an audio output device (col. 4 lines 12-14). Therefore the combination of Tran and Tan makes obvious all elements of claim 2 except an earphone. Davis discloses a 1,000 ohm earphone type speaker (col. 3 line 61 and col. 4 line 1) (a large impedance earphone) (i.e. first audio output device is an earphone). It would have been obvious to one of ordinary skill in the art to use Davis' earphone and Tran's unamplified external speakers in conjunction with Tran and tan's system combination in order to play various music files. It is well known that earphones are desirable to prevent the disturbance of others when listening to audio output. As such, it would have been obvious to use these two output devices in order to vary the amount of noise produced.

9. Regarding Claims 3 and 6, in addition to the elements stated above regarding claims 1 and 2, Tran further discloses to receive over the relatively high amplification first transmission paths, audio signals input to said first and second audio signal inputs when the detected impedance level corresponds to said passively driven speakers having said relatively low impedance level, and (b) to receive over the relatively low amplification second transmission paths, audio signals input to said first and second audio signal inputs when the detected impedance level corresponds to said self-driven speakers having said relatively

Art Unit: 2644

high impedance level. (col. 8 lines 30 – 41). Tran further discloses high amplification for passive speakers and low amplification for high impedance loads (i.e. 1000 ohm earphone). Therefore when Tran's unamplified speaker is connected, the amplification will be increased. When Davis' high impedance earphones are connected, the amplification will be reduced. (i.e. the controller increased the audio gain when the external speaker is connected to the ear jack, and the controller decreases the audio gain when the earphone is connected to the ear jack). Therefore the combination makes obvious all elements of claims 3 and 6.

10. Regarding Claim 4, in addition to the elements stated above regarding claims 1 and 2, it is inherent that Davis' earphone and Tran's unamplified speaker contain connection devices for connection to an audio output. Without these connections, the devices would not perform their designated function, reproducing audio signals

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C Flanders whose telephone number is (703) 305-0381. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forrester Isen can be reached on (703) 305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2644

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

acf

  
**FORESTER W. ISEN**  
**SUPERVISORY PATENT EXAMINER**